

CLAIMS

What is claimed is:

1. A base tank for storing flammable and combustible liquids and supporting a generator comprising:
 - an inner tank, said inner tank having side walls, a top wall and a bottom wall;
 - a plurality of planar baffles coupling opposing side walls of said inner tank and further coupling said bottom wall of said inner tank to said top wall of said inner tank;
 - an outer tank having side walls, a top wall and a bottom wall, said outer tank coupled to said inner tank;
 - a fire resistant material disposed on the outside of said walls of said outer tank;
 - wherein an interstitial space is defined between said walls of said outer tank and said walls of said inner tank;
 - a fire resistant solution disposed in said interstitial space; and
 - means for supporting a generator on said top wall of said outer tank.
2. A base tank as recited in claim 1, wherein said walls of said inner tank comprise type 316 stainless steel having a thickness at least about 3/16 inch.
3. A base tank as recited in claim 1, wherein said walls of said outer tank comprise type 316 stainless steel having a thickness at least about 1/4 inch.
4. A base tank as recited in claim 1, wherein said fire resistant solution comprises at least about 2 percent fire blocking gel and at least about 88 percent water.
5. A base tank as recited in claim 4, wherein said fire resistant solution comprises up to about 10 percent propylene glycol.

6. A base tank as recited in claim 5, wherein said fire blocking gel comprises BARRACADE™.

7. A base tank as recited in claim 1:
wherein said interstitial space adjoining said sidewalls of said inner tank and adjoining said bottom wall of said inner tank is about 2 inches or less; and
wherein said interstitial space adjoining said top wall of said inner tank is about 4 inches or less.

8. A base tank as recited in claim 7, wherein said interstitial space adjoining said sidewalls of said inner tank and adjoining said bottom wall of said inner tank is about 1 inch.

9. A base tank as recited in claim 1, wherein said means for supporting a generator comprises:

a plurality of base support members adapted to couple said bottom wall of said outer tank to an equipment pad, said base support members further adapted to support the weight of a base tank and a generator;

a plurality of interstitial spacers configured to support said bottom wall of said inner tank on said bottom wall of said outer tank, said interstitial spacers structurally coupled to said base support members and further adapted to support the weight of said inner tank and a generator;

said baffles in said inner tank structurally coupled to said interstitial spacers and said baffles further adapted to support the weight of a generator;

a plurality of tubular generator supports, adapted to couple said top wall of said inner tank to said top wall of said outer tank in said interstitial space;

wherein said tubular generator supports are structurally aligned with said baffles and further adapted to support the weight of a generator; and

a plurality of generator mounts, said generator mounts coupled to the top wall of said outer tank;

said generator mounts structurally coupled to said tubular generator supports;

said generator mounts further adapted to support the weight of a generator.

10. A base tank as recited in claim 9, wherein said baffles are spaced apart at a spacing of about 24 inches or less.

11. A base tank as recited in claim 1, further comprising a level detector configured to detect change of level of said fire resistant solution in said interstitial space.

12. A base tank as recited in claim 1, further comprising a water detector configured to detect the presence of water in said inner tank.

13. A base tank as recited in claim 1, wherein said fire resistant coating on said outer tank further comprises a fire resistant fiberglass mesh coated with an intumescent paint.

14. A base tank as recited in claim 13, wherein said intumescent paint comprises a 1/8th inch coating of Thermolag 3000™.

15. A base tank for storing flammable and combustible liquids and supporting a generator comprising:

an inner tank, said inner tank having side walls, a top wall and a bottom wall;
said walls of said inner tank comprising type 316 stainless steel of at least about 3/16 inch thickness;

a plurality of planar baffles coupling opposing side walls of said inner tank and further coupling said bottom wall of said inner tank to said top wall of said inner tank;

an outer tank having side walls, a top wall and a bottom wall, said outer tank coupled to said inner tank;

said walls of said outer tank comprising type 316 stainless steel of at least about 1/4 inch thickness;

a fire resistant fiberglass mesh disposed over the outside of said walls of said

outer tank;

an intumescent paint coating disposed over said fire resistant fiberglass mesh;

wherein an interstitial space is defined between said walls of said outer tank and said walls of said inner tank;

wherein said interstitial space adjoining said sidewalls of said inner tank and adjoining said bottom wall of said inner tank is about 2 inches or less;

wherein said interstitial space adjacent said top wall of said inner tank is about 4 inches;

a fire resistant solution disposed in said interstitial space, said fire resistant solution comprising at least 2 percent fire blocking gel and at least 88 percent water;

a level detector, configured to detect a change in level of said fire resistant solution in said interstitial space;

a water detector configured to detect the presence of water in said inner tank; and

means for supporting a generator on said top wall of said outer tank.

16. A base tank as recited in claim 15, wherein said means for supporting a generator comprises:

a plurality of base support members configured to attach said bottom wall of said outer tank to an equipment pad, said base support members further adapted to support the weight of a base tank and a generator;

a plurality of interstitial spacers configured to support said bottom wall of said inner tank on said bottom wall of said outer tank, said interstitial spacers structurally coupled to said base support members and further adapted to support the weight of said inner tank and a generator;

said baffles in said inner tank structurally coupled to said interstitial spacers and said baffles further adapted to support the weight of a generator;

a plurality of tubular supports adapted to couple said top wall of said inner tank to said top wall of said outer tank in said interstitial space;

wherein said tubular supports are structurally aligned with said baffles and

further adapted to support the weight of a generator; and

a plurality of generator mounts, said generator mounts coupled to the top wall of said outer tank;

said generator mounts structurally coupled to said tubular supports;

said generator mounts further adapted to support the weight of a generator.

17. A base tank as recited in claim 15, wherein said baffles are spaced apart at a spacing of about 24 inches or less.

18. A base tank as recited in claim 15, wherein said intumescent paint comprises a 1/8th inch coating of Thermolag 3000™.

19. A base tank as recited in claim 15, wherein said fire blocking gel comprises BARRACADE™.

20. A base tank as recited in claim 15, wherein said fire resistant solution further comprises up to about 10 percent propylene glycol.

21. A base tank for storing flammable and combustible liquids and supporting a generator comprising:

an inner tank, said inner tank having side walls, a top wall and a bottom wall;

a plurality of planar baffles coupling opposing side walls of said inner tank and further coupling said bottom wall of said inner tank to said top wall of said inner tank;

an outer tank having side walls, a top wall and a bottom wall, said outer tank coupled to said inner tank;

a fire resistant material disposed on the outside of said walls of said outer tank;

wherein an interstitial space is defined between said walls of said outer tank and said walls of said inner tank; and

a fire resistant solution disposed in said interstitial space.

22. A base tank as recited in claim 21, wherein said walls of said inner tank comprise type 316 stainless steel having a thickness at least about 3/16 inch.

23. A base tank as recited in claim 21, wherein said walls of said outer tank comprise type 316 stainless steel having a thickness at least about 1/4 inch.

24. A base tank as recited in claim 21, wherein said fire resistant solution comprises at least about 2 percent fire blocking gel and at least about 88 percent water.

25. A base tank as recited in claim 24, wherein said fire resistant solution comprises up to about 10 percent propylene glycol.

26. A base tank as recited in claim 25, wherein said fire blocking gel comprises BARRACADE™.

27. A base tank as recited in claim 21:
wherein said interstitial space adjoining said sidewalls of said inner tank and adjoining said bottom wall of said inner tank is about 2 inches or less; and
wherein said interstitial space adjoining said top wall of said inner tank is about 4 inches or less.

28. A base tank as recited in claim 27, wherein said interstitial space adjoining said sidewalls of said inner tank and adjoining said bottom wall of said inner tank is about 1 inch.

29. A base tank as recited in claim 21, further comprising:
a plurality of base support members adapted to couple said bottom wall of said outer tank to an equipment pad, said base support members further adapted to support the weight of said base tank and a generator;
a plurality of interstitial spacers configured to support said bottom wall of said

inner tank on said bottom wall of said outer tank, said interstitial spacers structurally coupled to said base support members and further adapted to support the weight of said inner tank and a generator;

said baffles in said inner tank structurally coupled to said interstitial spacers and said baffles further adapted to support the weight of a generator;

a plurality of tubular generator supports, adapted to couple said top wall of said inner tank to said top wall of said outer tank in said interstitial space;

wherein said tubular generator supports are structurally aligned with said baffles and further adapted to support the weight of a generator; and

a plurality of generator mounts, said generator mounts coupled to the top wall of said outer tank;

said generator mounts structurally coupled to said tubular generator supports; said generator mounts further adapted to support the weight of a generator.

30. A base tank as recited in claim 29, wherein said baffles are spaced apart at a spacing of about 24 inches or less.

31. A base tank as recited in claim 21, further comprising a level detector configured to detect change of level of said fire resistant solution in said interstitial space.

32. A base tank as recited in claim 21, further comprising a water detector configured to detect the presence of water in said inner tank.

33. A base tank as recited in claim 21, wherein said fire resistant coating on said outer tank further comprises a fire resistant fiberglass mesh coated with an intumescent paint.

34. A base tank as recited in claim 33, wherein said intumescent paint comprises a 1/8th inch coating of Thermolag 3000.